

REMARKS

Applicants thank the Examiner for the thorough consideration given the present application. Claims 1-4 and 7-9 are currently being prosecuted. Claims 5, 6 and 10 have been withdrawn from consideration. The Examiner is respectfully requested to reconsider his rejections in view of the amendments and remarks as set forth below.

Election/Restriction

The Examiner has repeated the previous requirement and made it final. Applicants understand that this is an election of species requirement rather than a restriction requirement. The Examiner's statements are not completely clear on this issue, such as by referring to "an election of species restriction". However, since the Examiner refers to the withdrawn claims as being drawn to a non-elected species, Applicants base the present Amendment on the understanding that this is an election of species requirement.

Rejection Under 35 U.S.C. § 102

Claim 1 stands rejected under 35 U.S.C. § 102 as being anticipated by Otani (JP 05-232297). This rejection is respectfully traversed.

The Examiner cited the reference to show a reflecting mirror 3 including a surface part having multilayer films of different periods. These are formed in predetermined shapes. The Examiner states that Otani further shows a detector 4 which is described in the abstract as a substrate.

First, Applicants note that since this reference is in the Japanese language, that any understanding thereof is based on the English language abstract and the Figures. If the Examiner has access to a translation, he is requested to provide it to Applicant. It is noted that the Examiner has mentioned in regard to claim 2, the meaning of claim 1, line 1, of the reference. Applicants therefore assume the Examiner has access to some additional English language material.

Claim 1 describes the wide band telescope as having a combination of elements, including a reflecting mirror with a surface having different types of multilayer films with the periodic length of each multilayer film being non-constant and reflecting light rays, and a detector to which the light rays are reflected which detect spectrally the light rays. Applicants submit that this combination of elements is not seen by Otani.

In particular, Applicants have amended claim 1 to further describe the multilayer films as having a periodic length which are non-constant. This is different from the Otani reference where the periodic length of each film is constant. Because of this construction, it is only possible in Otani to reflect X-ray wavelengths. This feature is very important for the present invention, since different types of multilayer films allows a wide range of light to be reflected. Since the reference does not teach the multilayer films as being non-constant and since this would not be obvious to one having ordinary skill in the art, Applicants submit that claim 1 is allowable thereover.

Rejection Under 35 U.S.C. § 103

Claim 2 stands rejected under 35 U.S.C. § 103 as being obvious over Otani. This rejection is respectfully traversed.

The Examiner states that the reference teaches the reflecting of light in the X-ray spectrum. The Examiner believes that it would have been obvious to have the multilayer films of Otani have total internal reflection in the visible spectrum.

Applicants submit that claim 2 is allowable based on its dependency from claim 1. Further, Applicants submit that it would not be obvious to have non-constant multilayer films as discussed above. Further, Applicants submit that there is no teaching in Otani to reflect visible light since the reference is specifically designed to reflect X-ray wavelengths. Accordingly, claim 2 is considered to be additionally allowable.

Claims 3 and 4 stand rejected under 35 U.S.C. § 103 as being obvious over Otani in view of Thoe (U.S. Patent No. 5,027,377). The Examiner relies on the Thoe reference to teach a circular shape. However, even if this reference does teach this feature, Applicants submit that the combination of the references still does not overcome the deficiencies noted above, and that claims 3 and 4 are therefore also allowable.

Claims 7, 8 and 9 stand rejected under 35 U.S.C. § 103 as being obvious over Otani and Thoe and further in view of Perryman (U.S. Patent No. 5,381,001). This rejection is respectfully traversed.

The Examiner recites Perryman to show the use of a superconducting tunnel junction detector and telescope. However, even if this reference does teach such a

detector, it does not aid the other references in overcoming their deficiencies noted above. Accordingly, these claims are also allowable.

Conclusion

In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination. In view of this, reconsideration of the rejections and allowance of all the claims are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert F. Gnuse (Reg. No. 27,295) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

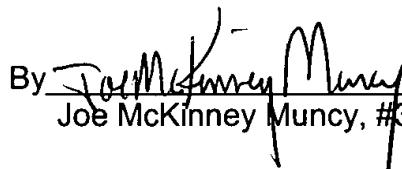
Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants respectfully petition for a two (2) month extension of time for filing a response in connection with the present application and the required fee of \$420 is being filed concurrently herewith.

Appl. No. 10/029,036
Reply filed October 1, 2003

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 
Joe McKinney Muncy, #32,334

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

 KM/RFG/ags